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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/079,011	02/18/2002	Joseph T. Friel	OPGA-0002	5174
23377	7590	06/05/2006	EXAMINER	
WOODCOCK WASHBURN LLP ONE LIBERTY PLACE, 46TH FLOOR 1650 MARKET STREET PHILADELPHIA, PA 19103			SELLERS, DANIEL R	
			ART UNIT	PAPER NUMBER
			2615	

DATE MAILED: 06/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/079,011	Applicant(s) FRIEL ET AL.	
	Examiner Daniel R. Sellers	Art Unit 2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2006.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8-18, 20-23, 25, 26 and 28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-18, 20-23, 25, 26, and 28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. **Claims 10 and 25** rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. **Claims 10 and 25** does not provide sufficient antecedent basis for the limitation "for storage *in the DRAM*".

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. **Claims 1, 3-6, 8-10, 12-18, 20-23, 25, 26, and 28** are rejected under 35 U.S.C. 103(a) as being unpatentable over Beckert, well-known prior art, and further in view of the SimpleAuto "Wireless, digital audio receiver for the car" (hereinafter SimpleAuto).
6. Regarding **claim 1**, see Beckert

An audio system for use in a vehicle for the playback of audio data by a sound amplification system of the vehicle, the audio system comprising:

(a) a dynamic random access memory (DRAM) that stores the audio data for playback; (Col. 2, lines 20-29 and Col. 7, lines 26-36)

(b) an audio playback device that reads the audio data from the DRAM and converts it to a form which can be output to the vehicle's sound amplification system; (Col. 3, lines 20-28)

(c) an audio acquisition device that receives the audio data to be stored in the DRAM; and (Col. 5, line 63 – Col. 6, line 6 and Col. 6, lines 56-65)

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(d) a power supply system between the vehicle's electrical system and the audio system, the power supply system supplying power to the audio system consistently including when the vehicle is not in use and detecting when the voltage provided by the vehicle's electrical system is low, whereby the power supply system selectively minimizes or removes power to the audio system when a low voltage is detected and said second audio acquisition device connects to said nearby computer or said media server to download digital data for storage in the DRAM and playback once a low voltage is no longer detected (Col. 13, line 65 – Col. 14, line 28 and line 57 – Col. 15, line 3)

Beckert teaches an audio system for the playback of audio in a vehicle comprising these features, wherein the audio is stored temporarily in buffers comprised of SRAM and system memory comprised of DRAM. Beckert does not teach a system that stores information on DRAM in the same fashion as it stores information on, for instance, a hard drive, however it is well-known that “Ramdrives” or “Ramdisks” can be created in the memory of a computer running an operating system as taught by Beckert. It would have been obvious for one of ordinary skill in the art to combine the teachings of Beckert with a “Ramdrive” for the purpose of utilizing very fast access times. The access time of DRAM is typically hundreds to thousands times faster than magnetic drives’ access times.

Beckert also teaches a power supply system detects a low voltage and minimizes the power supplied to the audio system. However Beckert does not teach that the second audio acquisition device connects to the nearby computer when sufficient voltage is returned to the system. SimpleAuto teaches that new content is automatically updated and streamed wirelessly to the car. It is implicit that when a low voltage is no longer detected, a device taught by SimpleAuto can resume with its scheduled updating process. It would have been obvious for one of ordinary skill in the art to combine the teachings of Beckert and well-known prior art and SimpleAuto for the purpose of automated backup or updating.

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7. Regarding **claim 3**, the further limitation of claim 1, see Beckert

... wherein the audio playback device comprises an integrated unit including a conventional vehicle radio, a digital audio playback device that records audio data to and reads audio data from said DRAM, and an audio amplifier that amplifies outputs of said vehicle radio and said audio playback device for output to the vehicle's sound amplification system. (Col. 12, lines 17-28)

Beckert teaches these features and the audio amplifier is inherent in the design of this system (Col. 1, lines 14-20).

8. Regarding **claim 4**, the further limitation of claim 1, see the preceding argument with respect to claim 13. Beckert teaches these features.

9. Regarding **claim 5**, the further limitation of claim 1, see the preceding argument with respect to claim 3.

... wherein said audio acquisition device comprises a radio receiver/demodulator that receives broadcast analog audio signals, converts the received audio signals into digital audio signals, and encodes the digital audio signals for storage in said DRAM.

Beckert teaches the capture of AM/FM signals.

10. Regarding **claim 6**, the further limitation of claim 1, see the preceding argument with respect to claim 3. Beckert teaches a device that receives analog radio signals (i.e. AM and FM), and Beckert teaches a device that receives digital broadcast signals (i.e. wireless internet) (Col. 5, line 63 – Col. 6, line 6).

11. Regarding **claim 8**, the further limitation of claim 1, see the preceding argument with respect to claim 3. Beckert teaches the capture of audio from a compact disc (Col. 12, lines 49-60).

12. Regarding **claim 9**, the further limitation of claim 1, see the preceding argument with respect to claim 1, see Beckert

... wherein said power supply system includes a power supply switch and a low-voltage monitor that detects a power output of the vehicle's electrical system and controls said power supply switch to

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selectively minimize or remove power to said audio system to prevent excessive drain on the vehicle's electrical system. (Col. 14, line 57 – Col. 15, line 3)

Beckert teaches a power supply that minimizes power to the device.

13. Regarding **claim 10**, see Beckert,

An audio system for use in a vehicle for the playback of audio data by a sound amplification system of the vehicle, the audio system comprising:

(a) a digital storage device that stores the audio data for playback; (Col. 2, lines 20-24)

(b) an audio playback device that reads the audio data from the digital storage device and converts it to a form which can be output to the vehicle's sound amplification system; (Col. 3, lines 23-28)

(c) a first audio acquisition device that receives the audio data to be stored in the digital storage device, said first audio acquisition device including a radio receiver/demodulator that receives broadcast audio signals and stores the received audio signals in said digital storage device; (Col. 2, lines 59-64)

(d) a second audio acquisition device comprises a radio receiver that receives audio data transmitted wirelessly to said audio system from a nearby computer or media server and stores the received audio data in the digital storage device; and (Col. 5, lines 9-12 and Col. 5, line 63 – Col. 6, line 6)

(e) a power supply system between the vehicle's electrical system and the audio system, the power supply system supplying power to the audio system consistently including when the vehicle is not in use and detecting when the voltage provided by the vehicle's electrical system is low, whereby the power supply system selectively minimizes or removes power to the audio system when a low voltage is detected and said second audio acquisition device connects to said nearby computer or said media server to download digital data for storage in the DRAM and playback once a low voltage is no longer detected (Col. 13, line 65 – Col. 14, line 28 and Col. 14, line 57 – Col. 15, line 3).

The combination teaches these features in an audio system in a vehicle, wherein a power supply system detects a low voltage and minimizes the power supplied to the audio system.

14. Regarding **claim 12**, the further limitation of claim 10, see the preceding argument with respect to claim 10. Beckert teaches an integrated system to be mounted in a dashboard or other suitable location.

15. Regarding **claim 13**, the further limitation of claim 10, see the preceding argument with respect to claim 12. Beckert teaches that the system can be located in any suitable location instead of being integrated into the dashboard. It is well known to

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place a CD changer in the trunk of a vehicle, beneath a seat, or in the center console between seats. It is also well known to use an FM transmitter to transmit the audio to the conventional vehicle audio system. It would have been obvious for one of ordinary skill in the art to modify Beckert using these well-known techniques for the purpose of avoiding space limitations imposed by integrating the system in the dashboard.

16. Regarding **claim 14**, the further limitation of claim 10, see Beckert

... wherein said first audio acquisition device comprises a radio receiver that receives broadcast digital signals from a wireless Internet connection and stores the received broadcast digital signals in said digital storage device. (Col. 5, lines 9-12)

Beckert teaches the ability to send data, or audio data, over a wireless Internet connection.

17. Regarding **claim 15**, the further limitation of claim 10, see Beckert

... wherein said first audio acquisition device comprises a radio receiver that receives broadcast analog audio signals from a radio broadcast station, converts the received audio signals into digital audio signals, and encodes the digital audio signals for storage in said digital storage device. (Col. 12, lines 17-28)

Beckert teaches these features.

18. Regarding **claim 16**, the further limitation of claim 10, see the preceding argument with respect to claim 14. Beckert teaches the use of a wireless Internet connection, but does not specifically teach that the wireless connection conforms to a standard. The office takes *Official Notice* that the wireless connection conforms to an IEEE 802.11 standard. It would have been obvious for one of ordinary skill in the art to combine the teachings of Beckert and an IEEE 802.11 standard for the purpose of greater compatibility.

19. Regarding **claim 17**, the further limitation of claim 10, see SimpleAuto

... wherein said computer or media server stores a library of digital audio and includes a software interface that permits a user to select audio selections from said library for transmission to said audio system for storage in said digital storage device at predetermined times or at predetermined time intervals. (p. 1, last lines of the first paragraph)

The teachings of Beckert include a software interface, but they do not teach the step of transmitting audio at predetermined times. SimpleAuto teaches “New Content is automatically updated and streamed wirelessly to the car.” The automatic method inherently transmits at predetermined times.

20. Regarding **claim 18**, the further limitation of claim 17, see the preceding argument with respect to claim 17. The office takes *Official Notice* that a computer can be remotely controlled.

21. Regarding **claim 20**, the further limitation of claim 19, see the preceding argument with respect to claim 19. Beckert teaches a power supply with a low-voltage monitor and minimizes the power to the audio system (Col. 14, line 57 – Col. 15, line 3).

22. Regarding **claim 21**, see the preceding argument with respect to claims 10, 14, and 16. Beckert teaches a system that allows a user to select data to be received wirelessly from a server. Beckert teaches that applications can be downloaded along with other data, wherein it is inherent that other data that is useful to this system is audio. Beckert teaches a wireless connection, wherein it is obvious to use an IEEE 802.11 wireless standard, which is a short-range radio networking protocol.

23. Regarding **claim 22**, the further limitation of claim 21, see the preceding argument with respect to claim 18. The combination of Beckert and SimpleAuto teach this feature.

24. Regarding **claim 23**, the further limitation of claim 22, see the preceding argument with respect to claim 18. The combination of Beckert and SimpleAuto teach the step of transmitting data wirelessly.

25. Regarding **claim 25**, see the preceding argument with respect to claims 10 and 14. Beckert teaches an audio system with these features.

26. Regarding **claim 26**, see the preceding argument with respect to claim 1. Beckert teaches an audio system which uses DRAM as memory in a computer.

27. Regarding **claim 28**, the further limitation of claim 27, see the preceding argument with respect to claim 18. The combination of Beckert and SimpleAuto teach the step of transmitting at predetermined times.

28. **Claims 2 and 11** are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Beckert and SimpleAuto as applied to claim 1 and 10 respectively above, and further in view of George, U.S. Pat. No. 6,317,657.

29. Regarding **claim 2**, the further limitation of claim 1, see George

... wherein said DRAM comprises a synchronous DRAM (SDRAM) and an SDRAM controller having a low-power self-refresh mode whereby the SDRAM may retain its contents but cannot be accessed by the audio playback device. (Col. 6, lines 27-47)

Beckert teaches the features of claim 1, but does not teach the use of SDRAM. George teaches the use of SDRAM and a battery backup for a low-power self-refresh mode. It would have been obvious for one of ordinary skill in the art to combine the teachings of Beckert and George for the purpose of using the faster SDRAM as the random access memory in the system.

30. Regarding **claim 11**, the further limitation of claim 10, see the preceding argument with respect to claim 2. Beckert teaches the features in claim 1, but does not teach the use of SDRAM. George teaches the use of SDRAM with a backup power supply.

Response to Arguments

31. Applicant's arguments with respect to claims 1-6, 8-18, 20-23, 25, 26, and 28 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

32. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hatano et al, U.S. Pat. No. 5,191,500 – Teaches an automobile power supply,

Berenguel et al., U.S. Pat. No. 5,241,508 – Teaches the use of Ramdisks,

Beckert et al., U.S. Pat. No. 5,794,164 – Mentioned in the primary Beckert reference,

Benyamin et al., U.S. Pat. No. 6,721,489 – Teaches a playlist manager for use in music server, and

Beckert et al., U.S. Pat. No. 6,862,651 – similar to the other Beckert references.

33. The applicant is reminded that Technology Center 2600 has undergone restructuring as of March 19, 2006. Any **further communication** regarding this application should **indicate the new Art Unit 2615** (old art unit 2644).

34. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel R. Sellers whose telephone number is 571-272-7528. The examiner can normally be reached on Monday to Friday, 9am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (571)272-7564. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



SINH TRAN
SUPERVISORY PATENT EXAMINER

DRS